biei resources

SUPPORTING INFECTIOUS DISEASE RESEARCH

# Monoclonal Anti-*Mycobacterium tuberculosis* LpqH (Gene Rv3763), Clone B (8E6-A5) (produced *in vitro*)

# Catalog No. NR-50098

This reagent is the tangible property of the U.S. Government.

# Product Description:

Antibody Class: IgM

Monoclonal antibody to *Mycobacterium tuberculosis*, strain H37Rv 19 kDa lipoprotein (LpqH; Rv3763), clone B (8E6-A5) was produced in cell culture using a B cell hybridoma generated by the fusion of myeloma cells with immunized mouse splenocytes.

# Lot: 70006605

# Manufacturing Date: 27NOV2018

Production and QC testing were performed by Colorado State University (CSU). The CSU documentation for lot 18.anti-19kDa.B.8.3.19.mm is attached.

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#### Work Sheet for Antibodies

#### General Information:

BEI Catalog Number: NR-50098 Product Description: Anti-19kDa hybridoma (LpqH, Rv3763), Clone B (8E6-A5) CSU Lot Number: 18.anti-19kDa.B.8.3.19.mm Species: *Mycobacterium tuberculosis* Strain: H37Rv Type (select one): <u>X</u> Mouse Monoclonal

\_\_\_\_\_ Rabbit Polyclonal

\_\_\_\_\_ Guinea Pig Polyclonal

# **Production Information:**

Cell Line: 18.anti-19kDa.B.8.16.19.Hyb SOP#: AB103.5, AB104.4 Notebook/pp: Monoclonal Antibody #3 BEI, pg. 47-113

Amount of CS Harvested: ~25.4 mLClarity: clear, filtered after ammonium sulfate precipitation dialysisIgG Purification: N/ASOP#: N/ANotebook/pp: N/A

Antibody Precipitation: 50% ammonium sulfate precipitation<sup>1</sup>, followed by dialysis into 1X PBS, final volume of ~7mL after dialysis (some used for QC)

Notebook/pp: Monoclonal Antibodies #3 BEI, pg. 115-last pages and on ammonium sulfate precipitation protocol attached in notebook, Monoclonal Antibodies #4 BEI, pg. 6-12, 17-19

lg isotype: IgM SOP#: AB106 Notebook/pp: Monoclonal Antibodies #4 BEI, pg. 25

# QC Information:

Tested Against: 1µg ova conjugated peptide H2N-IAIGGAATGIAAVLTDGNPP(dPEG4)CKKK-amide, 5µg TX-114

\* TX114 is a fraction enriched with lipoproteins such as Psts1 (38kDa, Rv0934c), LprG (25kDa, Rv1411c), and LpqH (19kDa, Rv3763c). (Wolfe et al, 2010. JPR)

SOP#: AB102.1, SP039.1 Notebook/pp: Monoclonal Antibodies #4 BEI, pg. 18-19

Tested by: Western blot: X Titer: 1: 1000

ELISA: X Titer: 1:100

Special Instructions: 3% BSA recommended for blocking. Long substrate exposure time (>10 minutes) may be necessary for developing western blots.

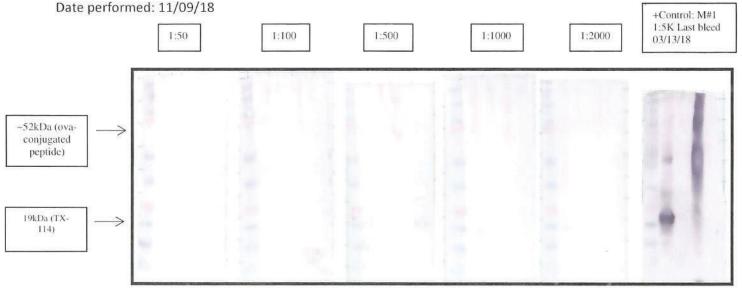
# QC ELISA:

Date performed: 11/09/18

Titer	30 minutes, 1μg conjugated ova-peptide (averages)	45 minutes, 1μg conjugated ova-peptide (averages)	30 minutes, 5µg TX-114 (averages)	45 minutes, 5μg TX-114 (averages)	Date
1:50	1.364	1.962	0.105	0.12	11/09/18
1:100	1.026	1.476	0.123	0.135	11/09/18
1:500	0.427	0.602	0.0875	0.0945	11/09/18
1:1000	0.325	0.442	0.089	0.0945	11/09/18
1:2000	0.203	0.266	0.0915	0.0975	11/09/18
Positive Control (1:5K Mouse#1 Polyclonal Antibody, Last bleed 3/13/18)	OVERFLOW	OVERFLOW	0.696	0.994	11/09/18
Negative Control (TBST)	0.0785	0.0795	0.089	0.0945	11/09/18

Note: Antibody reactive against linear peptide. Therefore, if running an ELISA for native protein, a denatured ELISA protocol should be used<sup>2</sup>.

QC Western blot:



Gel Order: M-5µg Tx-114-blank-1µg ova-conjugated peptide-blank

Aliquot Information: \_\_\_\_40 x 100µL aliquots (BEI), 7.5 x 100µL aliquots (In-House,QC)

11/27/18 (date) (Research Associate) (Laboratory Supervisor) date

# References:

- Grodzki A.C., Berenstein E. (2010) Antibody Purification: Ammonium Sulfate Fractionation or Gel Filtration. In: Oliver C., Jamur M. (eds) Immunocytochemical Methods and Protocols. Methods in Molecular Biology (Methods and Protocols), vol 588. Humana Press
- Hnasko, R., Lin, A., McGarvey, J.A., & Stanker, L.H. (2011). A rapid method to improve protein detection by indirect ELISA. *Biochemical and Biophysical Research Communications*, 410, Issue 4, 726-731.